BUILDING PERMIT
Application Form

CAL POLY
SAN LUIS OBISPO
Facilities Planning

Applicant's Name: Bryan Klofas
(Applicant will be the primary contact for this project.)

Today's Date: 4 May 2004

Phone Number: 756-5087

Department: Aero

Optional:
Names & Phone #s of Other Involved Parties
(Supervisor, dean, advisor, etc.)

Jordi Puig-Suari 756-6479

Project Name: Earth Station Antenna installation

Bldg Name: ATL

Bldg #: 007

Who is Doing the Work?
(Check all that applies)

☒ Contractor ☐ Facilities Services Labor ☐ Other (explain)
☐ Department Labor ☒ Student Project

Source of Funding: Club account

Est. Cost/Budget: $500

Description of Project: Polysat would like to place more satellite antennas on top of the ATL. We will be using a self-supporting antenna tripod that requires no building attchment. The tripod is held down by weights. This second antenna is critical for tracking two satellites at the same time, as will be happening in the fall when both of our picosatellites are placed in different orbits.

Status of Project: ☐ Proposal (*We can only review the concept, not issue a permit.*)
☒ Plans Ready to Review ☐ Under Construction (oops!)

Approval Signature: _____ DAN WALSH
(Applicant's Dean, Division Head, or Dept. Head) *(Please print name)*

Other Approvals, Reviews, Formal or Informal: _____

Attachments: Mount Schematic, antenna schematic, Pictures, map
(If any...)

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MAY 11 2004
GENERAL ENGINEERING PROGRAM

Return Application Form to Facilities Planning

March 1998

To: Facilities Planning
From: Bryan Klofas
CC: Jeff Nadel, Jordi Puig-Suari
Date: 10 May 2004

Re: Request for permit to install antennas

The Polysat project would like to put a second set of antennas on the roof of the Advanced Technologies Laboratory, Building 007. The antennas are necessary to communicate with our satellites that are going to be launched in October 2004.

A free-standing mast will be installed somewhere above room 11 or 12 in Building 007. See attached map for exact location. Care will be taken to ensure that the unit is placed above a joint of the 24" and 12" steel beams on the undersides of the roof.

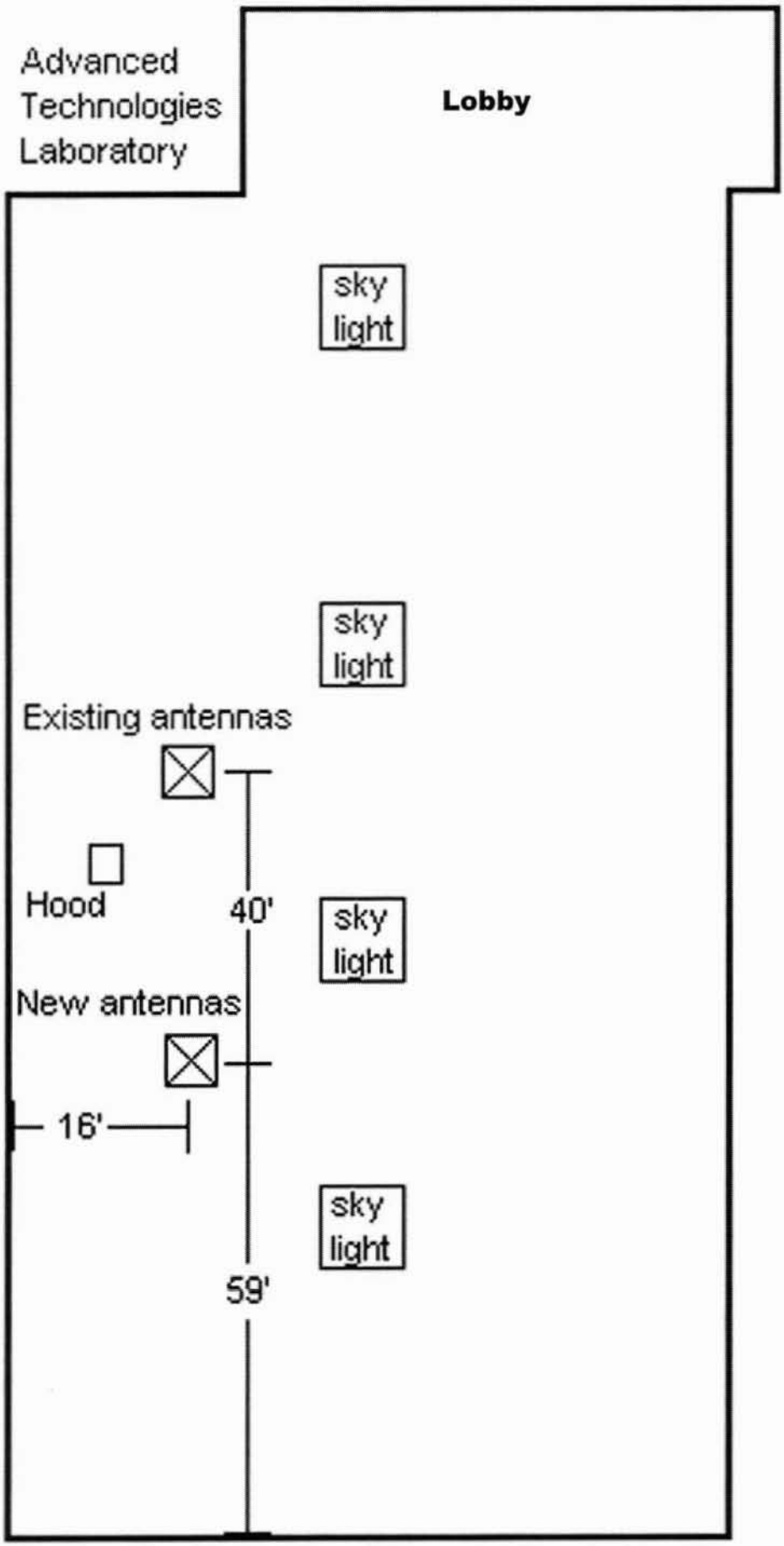
The mast unit is a Rohn Industries model JRM23810. The base area is 5.5 feet per side for a total of 30.25 square feet, and the central mast extends 10 feet vertically. An antenna rotor will be placed on top of the mast, and a horizontal section of mast will be attached to the rotor. Please see the attached pictures. The new unit will look almost exactly the same as the current one, but with only one smaller antenna. No other mast extension will be placed on top of the 10 foot section. The entire unit (mast, cinder blocks, and antenna) should weigh around 550 pounds (for a total of around 18 pounds per square foot), and should easily be supported by the beams.

The antenna is a M^2 Inc. commercial antenna. It is approximately 10 feet long. The antenna will be mounted to the horizontal mast in the center, so the closest the antenna will come to the roof is 5 feet.

Polysat will be responsible for maintenance and upkeep of the antennas until they are dismantled. The antenna and mast unit currently up on the roof now is inspected every two months by qualified personnel from Polysat, and the new unit will be inspected at those intervals as well.

There will be no roof penetration. The hood for exiting cables was installed at an earlier date. Cal Poly Facility Services will install a work mat on top of the gravel roof, and the mast will rest on top of the work mat. The work mat is essential so the unit does not slide around or pierce the roof. The work order for the installation of the roof mount will be submitted to Facility Services when this building permit is approved.

Attachments: Rohn JRM23810 schematic, 436CP30 antenna schematic, roof diagram, conceptual pictures.


Advanced
Technologies
Laboratory
Lobby
sky
light
sky
light
Existing antennas
Hood
40'
sky
light
New antennas
16'
sky
light
59'

Current image of existing antennas.

Conceptual image of new antenna.